

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

**WSOU INVESTMENTS, LLC D/B/A
BRAZOS LICENSING AND
DEVELOPMENT,**

Plaintiff,

V.

**DELL TECHNOLOGIES INC.,
DELL INC., AND EMC
CORPORATION,**

Defendants.

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§ CIVIL ACTION 6:20-CV-00474-ADA
§ CIVIL ACTION 6:20-CV-00475-ADA
§ CIVIL ACTION 6:20-CV-00476-ADA
§ CIVIL ACTION 6:20-CV-00479-ADA

PATENT CASE

JURY TRIAL DEMANDED

PLAINTIFF'S REPLY CLAIM CONSTRUCTION BRIEF

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I. U.S. Patent No. 7,212,536 (Case No. 6:20-cv-00474) Claim Terms**1. “bridge” (Claims 1, 12)**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“a network interface device that operates no higher than the data link layer”

This term should get its plain and ordinary meaning. Defendants expressly admit that this term has a “well-understood meaning to a POSA at the time of the patent.” Resp. Br. at 3. Thus, no construction is necessary. Further, instead of addressing WSOU’s arguments and the fact that no construction is necessary since this term is “well-understood,” Defendants resort to casting completely speculative aspersions against WSOU: “WSOU will doubtless argue that a ‘bridge’ includes devices that no one would consider a bridge in 2001.” Resp. Br. at 4. Ironically, what is “doubtless” is that Defendants’ straw-man concern is by Defendants’ own words moot since “no one would consider” it.

Regardless, Defendants’ proposed construction is vague and confusing. For example, the phrase “operates no higher than the data link layer” does not appear anywhere in the specification and includes a limitation (i.e. “no higher”) that is without context. The specification already provides that “[t]he invention relates to data communication networks which include bridges or similar data handling devices.” ’536 patent, 1:6-7. In illustrative embodiments, the specification also provides that “[b]ridge 16 receives packets from a connected LAN segment 12 at local interface 23 which is connected to a first bridge port 25. Bridge 16 may comprise additional bridge ports connected to additional local interfaces (not shown) which are associated with different LAN segments. Bridge 16 also passes data received from other sources (such as other LAN segments) to LAN segment 12 by way of bridge port 25.” *Id.*, 4:26-33. Defendants’ proposed construction should be rejected.

2. “channel in a connection-based network” (Claims 1, 12)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“one of the paths that has been established in a

	network for communications”
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Defendants admit to seeking their erroneous construction to support an argument for *non-infringement*. See Resp. Br. at 5. For this reason alone, Defendants’ proposed construction should be rejected.¹ Regardless, Defendants further acknowledge that their construction is confusing (Resp. Br. at 7) but only state that Defendants “would not object to modifying its construction to be ‘a channel that has been established in a network for communications.’” *Id.* While Defendants only make their own position more confusing by stating they wouldn’t object to modifying, it is largely irrelevant given that Defendants have failed to show why a construction is necessary, much less one of the two constructions Defendants now proposes. The specification itself provides numerous illustrative examples of a channel in a connection-based network. See e.g. ’536 patent, Fig. 1 (“FIG. 1 is a schematic diagram of a network having a number of ethernet segments connected by channels in a connection-based network.” *Id.*, 3:5-7), Fig. 3 (“FIG. 3 illustrates a pair of segments of a VLAN interconnected by a plurality of channels through a connection-based network.” *Id.*, 3:10-12). Defendants’ proposed construction is confusing and unnecessary and should be rejected.

3. **“a forwarding system configured to read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface.” (Claim 1)**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	This term is subject to 35 U.S.C. § 112, ¶ 6. Function: read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface

¹ See e.g., Dkt. 67, Tr. of December 10, 2020 hearing, at 31:18-25.

	Structure: Indefinite
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Defendants do not dispute that claim 1 recites “a bridge having a plurality of bridge ports.” But Defendants argue that because the “bridge” is recited in a limitation before the “forwarding system,” the forwarding system cannot be the bridge. Resp. Br. at 8-9. But Defendants provide no support for their position. Here, a person of skill in the art would understand the claim language to refer to structure, given that the specification expressly recites that “bridge 16 comprises an ethernet card 20” (’536 patent, 3:54) and that “bridging system 27 is on ethernet card 20” and “[b]ridging system 27 comprises a plurality of bridge ports by way of which data can be sent and/or received.” *Id.*, 3:60-62. Further, the specification provides certain exemplary embodiments, for example, in an “illustrated embodiment”:

“**Bridge 16** receives packets from a connected LAN segment 12 at local interface 23 which is connected to a first bridge port 25. Bridge 16 may comprise additional bridge ports connected to additional local interfaces (not shown) which are associated with different LAN segments. Bridge 16 also passes data received from other sources (such as other LAN segments) to LAN segment 12 by way of bridge port 25. **Bridge port 25 may implement a set of service queues which handle the forwarding of packets having different user priorities onto LAN segment 12.**” ’536 patent, 4:26-35 (emphasis added).

The specification further provides:

“*Certain implementations of the invention comprise computer processors which execute software instructions which cause the processors to perform a method of the invention.* For example, **bridging system 27 may comprise a computer processor which executes software instructions** which cause the processor to associate specific ones of ports 30 with specific channels on cell relay network 14. *The invention may also be provided in the form of a program product. The program product may comprise any medium which carries a set of computer-readable signals comprising instructions which, when executed by a computer processor, cause the data processor to execute a method of the invention.*” *Id.*, 8:46-57 (emphasis added).

As seen above, the specification provides various exemplary embodiments showing that the forwarding system may be a bridge with a bridge port and a bridging system, or a computer

processor or a computer-readable medium comprising instructions for a processor (such as those found in Figure 6, *see e.g., Id.*, 6:15-25). Accordingly, this term is not subject to 35 U.S.C. § 112 ¶ 6. Regardless, Defendants fail to prove by clear and convincing evidence this term is indefinite. *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

4. “means for reading priorities of data frames directed by the bridge to at least a first one of the bridge ports”

WSOU's Proposed Construction	Defendants' Proposed Construction
<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: reading priorities of data frames directed by the bridge to at least a first one of the bridge ports</p> <p>Structure: bridge, with bridging system and bridge port, and equivalents thereof</p> <p>Algorithm (if required): <i>see e.g.</i>, 4:26-37, 5:40-55, 6:4-14, 6:15-42, 7:23-44, 8:21-28, Figs. 1, 2, 4, 5A-I, 6, and equivalents thereof.</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: reading priorities of data frames directed by the bridge to at least a first one of the bridge ports</p> <p>Structure: Indefinite</p>

The **correct corresponding structure** is “bridge with bridging system and bridge port, and equivalents thereof.” This is shown by the specification in exemplary embodiments. For example:

“**Bridge 16** receives packets from a connected LAN segment 12 at local interface 23 which is connected to a first bridge port 25. Bridge 16 may comprise additional bridge ports connected to additional local interfaces (not shown) which are associated with different LAN segments. Bridge 16 also passes data received from other sources (such as other LAN segments) to LAN segment 12 by way of bridge port 25. **Bridge port 25 may implement a set of service queues which handle the forwarding of packets having different user priorities onto LAN segment 12.** The service queues may be implemented, for example, according to the IEEE 802.1D and 802.1Q specifications.” ’536 patent, 4:26-37 (emphasis added).

As another example, the specification describes:

“**Bridging system 27 maintains a mapping between user priorities and available channels 15** in cell relay network 14. In preferred embodiments, **for each of bridge ports 26, a map is maintained.** The map may comprise, for example, a lookup table

accessible to the system which manages the port 26. The map associates each of the user priorities in whatever system of user priorities is being used with a channel 15 in connection-based network 14 which is accessible by way of one of the service interfaces 30 associated with the port 26. The map may map between user priorities and predetermined connection identifiers for the channels. For example, bridging system 27 may contain data which associates each of bridge ports 26 with a VPI and data which associates each of service interfaces 30 with a VCI, as described above. Equivalently, the map may map between user priorities and service interfaces 30.” *Id.*, 5:40-55 (emphasis added).

Additionally, the specification provides:

“FIG. 6 illustrates a method 100 according to the invention for forwarding a priority tagged data frame. A frame is received at block 102. In blocks 104 and 106 **the priority of the frame is determined and the frame is forwarded to a bridge port for delivery** to a destination. Blocks 104 and 106 may occur in either order. In block 108, the frame is assigned to a channel (or equivalently to a service interface associated with an available channel). **Assigning the frame to a channel may comprise looking up the priority determined in block 104 in a map. Then in block 110 the frame is forwarded on the channel.**”

“The mapping used by **bridging system 27 for a bridge port 26** will depend upon the number of channels 15 available to the bridge port 26 (e.g. to a number of the service interfaces 30 which are connected to active channels in network 14). Since the number of available connections 15 may vary over time, a scheme comprising a plurality of mappings may be provided. As the number of available channels 15 changes, different mappings are selected from the scheme. For example, where, for a particular bridge port 26 there is only a single channel 15 available, the mapping is trivial. All data which passes through that bridge port 26 must travel on the single available channel. As more channels 15 become available, **the correspondence between user priorities and channels 15 can be remapped so that frames having different user-priorities can be sent over different channels 15. The mapping may be stored in a lookup table, the lookup table may be updated each time a channel is added or dropped.**” *Id.*, 6:15-42 (emphasis added).

Defendants argue that the patent never states how the priority is determined (Resp. Br. at 10), but that is fully explained by the claim language. Specifically, the claim term recites *reading* priorities; therefore, all that is required to “determine” a priority as described in the specification

is reading what is already there. This is confirmed by the specification expressly providing for an embodiment for “data which is untagged (i.e. **does not include** an explicit user priority)” ’536 patent, 7:23-24 (emphasis added).

Defendants’ further arguments that structure cannot be itself the bridge (Resp. Br. at 11) is inapposite because Defendants ignore the other components of the correct corresponding structure: “bridge, **with bridging system and bridge port**, and equivalents thereof.” Additionally, the specification recites that the invention may be implemented comprising computer processors executing software instructions, or with other components that perform the functions illustrated in the exemplary embodiments, including components which are not structurally equivalent to the structure disclosed in the specification. *Id.*, 8:46-9:7.

Accordingly, the corresponding structure is a bridge with bridging system and bridge port, and equivalents thereof. To the extent an algorithm is required, exemplary algorithms disclosed in the specification are recited at ’536 patent, 4:26-37, 5:40-55, 6:4-14, 6:15-42, 7:23-44, 8:21-28, Figs. 1, 2, 4, 5A-I, 6. For example, the specification teaches: “Bridge port 25 may implement a set of service queues which handle the forwarding of packets having different user priorities onto LAN segment 12.” *Id.*, 4:33-35. In a further embodiment, a map of user priorities and available channels, such as a lookup table, is accessible to a bridging system that manages a bridge port. *Id.*, 5:41-55. In another embodiment, the specification teaches a frame is received, the priority of the frame is determined, and then the frame is forwarded to a bridge port for delivery. *Id.*, 6:15-25. As yet another example, the specification teaches that a bridge may permit support for user priorities to be disabled, and in such an instance, all VLAN traffic may be carried over a single channel per port. *Id.*, 7:41-44; *see also Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1384-86 (Fed. Cir. 2011) (holding that to satisfy the disclosure requirement of the statute, “the patent need only disclose sufficient structure for a person of skill in the field to provide an operative software program for the specified function”). Regardless, Defendants fail to prove by clear and convincing evidence this term is indefinite. *Sonix*, 844 F.3d at 1377.

II. U.S. Patent No. 7,453,888 (Case No. 6:20-cv-00475) Claim Terms

1. “stackable trunk port” (Claims 1, 8, 9, 10, 11, 12, 13, 15, 19, 20)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“trunk port supporting the Riverstone solution (i.e. the additional extension 802.1Q packet header)”

Defendants’ arguments regarding alleged lexicography in the prosecution history fails because as Defendants’ own quotation recites, patentee was only discussing what the Riverstone solution describes, and patentee was merely providing an example of how the prior art differed. But as the specification points out, there were still deficiencies with the Riverstone solution. *See e.g.*, ’888 patent, 8:4-9. The claims and specification do not require the specific elements of Defendants’ construction. Instead, the specification describes a proposed change to an IEEE standard, and then the specification discloses that developments in the field included at the time a proposal to use an additional extension 802.1Q packet header (’888 patent, 5:49-55), and the specification teaches that “[t]he use of the additional packet header provides for a hierarchical grouping of VLANs referred to as VLAN stacking..” ’888 patent, 5:55-57. Thus, a stackable trunk port need only support the use of an additional VLAN header. *See also, Id.*, Fig. 2.

2. “backbone VLAN trunk” (Claims 1, 5, 6, 7, 12, 15, 16, 17, 18, 19, 20)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“data transport trunk links defined between stackable trunk ports on core routers”

Defendants’ arguments regarding lexicography in the prosecution history fails as nothing quoted by Defendants rises to lexicography. There, the patentee generally describes a preferred embodiment, as shown by patentee providing examples of where the prior art and exemplary limitations from the claims differ. *See Resp. Br.*, Ex. 7, at 11-13. There is no requirement in the claims or specification that this term carries requirements such as stackable trunk ports or core routers. It appears Defendants are attempting to improperly import limitations from an **exemplary embodiment** in the specification. *See e.g.*, ’888 patent, 8:61-9:35 (“In accordance with an

exemplary embodiment...”) (emphasis added). Neither the specification nor the claims impose any such limitations upon this term. Instead, the specification describes another exemplary embodiment describing that a backbone VLAN trunk bridges two managed domains. *See Id.*, 11:49-51. Further, the claims themselves show that there is no need to construe this term, at least as to stackable trunk ports, because stackable trunk ports are recited as separate elements that correspond to a backbone VLAN trunk. *See Id.* (Claim 1, elements c1 and c2; Claim 15 elements b1 and b2).

Moreover, Defendants’ proposed construction should be rejected for being confusing and being expressly rejected by the specification, at least as to “core routers”:

“The definition of a core router is somewhat blurred as the data transport industry is undergoing a “box consolidation” trend wherein even the routers can be logical entities (such as virtual routers). The concepts will be described herein making reference to distinct access routers (106) and core routers (306) **without limiting the invention thereto.**” *Id.*, 8:52-57 (emphasis added).

In other words, the specification expressly warns that the phrase “core routers” is vague and unreliable (“somewhat blurred”), and the specification expressly discloses that the phrase is not intended to be limiting on the invention in any way. Defendants’ arguments that the specification’s teachings that the phrase “core router” is “somewhat blurred” suggests that this term should be held indefinite (Resp. Br. 17) is without merit as the term “core router” doesn’t appear anywhere in the claims. Defendants beg the question. Furthermore, it is exactly the point that Defendants’ proposed construction fails because it seeks to include a phrase that the specification expressly states that the claims (and thus this term) are not limited to.

3. **“wherein the selection and association of at least one backbone VLAN ID with each one of the corresponding plurality of backbone VLAN trunks is undertaken irrespective of one of an in-use and a stand-by designation of each one of the plurality of backbone VLAN trunks and each one of the plurality of stackable trunk ports” (Claim 1) / “wherein the association of the plurality of backbone VLAN IDs with the backbone VLAN trunk is undertaken irrespective of one of an in-use and a stand-by designation of the backbone VLAN trunk and the**

at least one stackable trunk port” (Claim 15)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“wherein the provisioning method ignores the designation of a backbone VLAN trunk as in-use or stand-by when associating the backbone VLAN ID with the backbone VLAN trunks (as opposed to, during association of VLANs with trunks, explicitly designating physical VLANs associated with a logical VLAN as in-use and explicitly designating other physical VLANs associated with the logical VLAN as back-up)”

Defendants’ proposed construction (that totally rewrites the claim language) is unclear and omits entire concepts such as “selection and association” and “stackable trunk ports.” Defendants’ arguments are further unclear. *See* Resp. Br. at 18-20. Regardless, to the extent it can be understood, Defendants’ arguments for prosecution history disavowal fails. *See Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1375 (Fed. Cir. 2008) (“Prosecution disclaimer does not apply to an ambiguous disavowal.”). “[I]n order for prosecution disclaimer to attach, the disavowal must be both clear and unmistakable.” *3M Innovative Properties Co. v. Tredegar Corp.*, 725 F.3d 1315, 1325 (Fed. Cir. 2013). Here, not only do Defendants fail to make a showing under the exacting standards of disavowal, the prosecution history itself does not support any disavowal such that “the claims cannot read on a system that explicitly designates one port as active and others as backup” (Resp. Br. at 20). For example, the patentee in the cited prosecution history was distinguishing based on the examiner’s understanding of “irrespective of” with regard to the backup method disclosed by the prior art and as to *backbone VLAN trunks*, not ports as Defendants are contending. *See* Resp. Br. Ex. 8 at 12. Further, patentee’s example was as to the association of a backbone VLAN ID to a backbone VLAN trunk, but backbone VLAN trunks “may each already have a designation of in-use or stand-by.” *Id.* Thus, while patentee discusses the prior art’s teachings with regard to VLANs, it is in contrast to the examiner’s understanding of “irrespective of” and in the context of during association of backbone VLAN IDs with backbone VLAN trunks and making explicit designations at that time, there is no clear and unmistakable disavowal.

Furthermore, there is also no clear and unmistakable disclaimer that such that the claims “cannot include methods that allow one in-use backbone VLAN trunk to be assigned to a particular backbone VLAN ID.” Resp. Br. at 20. In the prosecution history the patentee merely recites the disclosure of the prior art, which happened to *explicitly* designate one of the physical VLANs as in-use. However, the patentee’s argument had nothing to do with the number “one”; it had to do with the performance of “explicitly designates” during association. Resp. Br., Ex. 8 at 12. Moreover, the prior art recited physical VLANs, not backbone VLAN trunks. *Id.* In sum, to the extent Defendants arguments can be understood, nothing in the prosecution history rises to the exacting standards of disavowal in any of the various ways Defendants appear to propose.

III. U.S. Patent No. 7,565,435 (Case No. 6:20-cv-00476) Claim Terms

1. “setting the IPPC of one of the ports of one of said bridges within the MSTI to a lower IPPC when said port is part of the VLAN member set” (Claims 1, 8, 13)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	order of steps The setting of the IPPC to a lower IPPC must occur after the creation and configuration of the Multiple Spanning Tree Instances step and after the creation of the VLAN member sets step

Defendants seek to limit the order of this term that occurs in Claims 1, 8, and 13 of the ’435 patent. WSOU contends that the language of the claims should be given its plain and ordinary meaning and that any antecedent basis recited by the claim language will govern any required order of any of the steps. “Unless the steps of a method actually recite an order, the steps are not ordinarily construed to require one. However, such a result can ensue when the method steps implicitly require that they be performed in the order written.” *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1342-43 (Fed.Cir.2001).

Additionally, while Claim 1 is a method claim, Claims 8 and 13 are system and apparatus claims, which do not require performance of steps. Defendants’ cited cases from other district

courts at best stand for the non-controversial proposition that if the claim language expressly requires a certain order, that order may be required in apparatus claims, but that is not the case here. Regardless, Defendants’ proposal to limit the claim to a specific order of steps is unwarranted because, at the very least, there is no requirement in the claim language that the so-called “creation and configuration of the Multiple Spanning Tree Instances step” and the “creation of the VLAN member sets step” must be *completed* before the performance of the term at issue (so-called “setting the IPPC to a lower IPPC”) begins.² In other words, nothing prevents the steps from being performed concurrently. *See Cybersettle, Inc. v. National Arbitration Forum, Inc.*, 243 Fed. Appx. 603 (Fed. Cir. 2007) (nonprecedential) (“We agree with NAF that the comparison and testing steps logically cannot begin until an offer and a demand are received. But that does not mean that the ‘receiving’ steps must be completed before the comparison and testing steps begin. To the contrary, the step of calculating the differences between demands and offers can occur concurrently with the receipt of multiple demands and offers. As each new pair of bids is received, the bids are compared.”)

The two “steps” that Defendants contend must be performed first do not have to be completed before the term at issue is performed. The two “steps” Defendants identify in Claim 1 recite:

“creating and configuring **a plurality** of Multiple Spanning Tree Instances (MSTIs) whose active topology covers the topology of Virtual Local Area Networks (VLANs) being used within the computer network;

creating VLAN member sets and associating each of said VLANs with an appropriate **one of the** MSTIs, each of said VLAN member sets indicating the ports in each of the bridges within **one of the** MSTIs to which data traffic destined to members of the associated VLAN is being forwarded;” ’435 patent, 9:61-10:3 (emphasis added).

² And Defendants’ citation to the specification is merely an excerpt from an exemplary embodiment, which is confirmed by the specification reciting: “there are shown various scenarios that **can occur...**” ’435 patent, 4:6-6 (emphasis added). Nothing in Defendants’ cited excerpt is limiting.

As shown by the language of Claim 1, there is nothing in the claim language that prevents the term at issue from being performed before *all* of the “plurality” of Multiple Spanning Tree Instances are created and configured and before *all* the VLAN member sets are created. Defendants’ argument regarding the phrase “**an** appropriate one” also fails because the phrase only requires a **single** “appropriate one.” Further confirming that the term at issue does not need to be performed before *all* of the “plurality” of Multiple Spanning Tree Instances are created and configured and before *all* the VLAN member sets are created.

2. “ideally” (Claims 7, 11, 18)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	Indefinite

“Ideally” is not a term of degree and is not subjective. For example, claim 6 (from which claim 7 depends) recites a limitation setting the high IPPC value to be sufficiently high in such a way that the corresponding ports are among the last ones commanded by a Multiple Spanning Tree Protocol to start forwarding data traffic after a failure in the computer network. ’435 patent, 10:34-38. As an example, the specification teaches such a value can be “a value higher than any of the values used for the IPPCs of ports that are part of the VLAN member set.” *Id.*, 5:16-18. Claim 7 further refines that limitation to recite that the “high IPPC is a value that is ideally between the highest value allowed by an encoding and the highest IEEE standard recommended value....” *Id.*, 10:45-49. In other words, instead of just setting the high IPPC value to a value such that the corresponding ports are the last ones to be commanded by a MSTP to start forwarding data traffic, set the high IPPC to a value between the highest value allowed by an encoding and the highest IEEE standard recommended value.³

³ Moreover, “while interpretations that render some portion of the claim language superfluous are disfavored, where neither the plain meaning nor the patent itself commands a difference in scope between two terms, they may be construed identically.” *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004). In *Power Mosfet*, the Federal Circuit held that “the addition of the term ‘directly’ to an existing requirement of physical contact imposes no additional restrictions on the phrase.” *Id.*

3. “processing unit for setting the Internal Port Path Cost (IPPC) of one of the ports of one of said bridges within the MSTI to a high IPPC when said port is not part of the VLAN member set” (Claim 8)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface</p> <p>Structure: Indefinite</p>

The question whether the term “processing unit” invokes section 112, paragraph 6, depends on whether persons skilled in the art would understand the claim language to refer to structure, assessed in light of the presumption that flows from the drafter’s choice not to employ the word “means.” *Skky, Inc. v. Mindgeek, S.A.R.L.* 859 F.3d 1014, 1019 (Fed. Cir. 2017) (“To determine whether a claim recites sufficient structure, ‘it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function.’”).

Here, a person of skill in the art would understand the claim language to refer to structure, where the specification provides certain exemplary embodiments that recite “the **processing units 108 in bridges** A, B, C and D are used to set the IPPC of any port P1, P2 and P3 of any bridge A, B, C and D within one MSTI to a HiIPPC value if that port is not part of the VLAN member set.” ’435 patent, 7:57-61 (emphasis added), Fig. 1. Moreover, the specification also states that “it can be readily appreciated by those skilled in the art that the present invention provides a method for fully- or semi-automatically configuring IPPCs of ports in the bridges of a computer network and in fully- or semi-automatically creating as many new MSTIs as necessary to ensure proper VLAN connectivity.” *Id.*, 8:4-9. Accordingly, as the specification shows, the “processing unit” in this term is processor (108) within a bridge device. *See e.g., Samsung Elecs. Am. v. Prisia Eng’g Corp.*,

948 F.3d 1342, 1353 (Fed. Cir. 2020) (holding that a ‘digital processing unit’ is not subject to § 112, ¶ 6, because the term ‘clearly serves as a stand-in for a ‘general purpose computer’ or a ‘central processing unit,’ each of which would be understood as a reference to structure); *Panoptis Patent Management, LLC v. Blackberry Ltd.*, 2017 Markman 497571, 2017 WL 497571, *18-*19 (E.D. Tex. 2017) (Finding that the term “processor” refers to a recognized class of structures).

Defendants’ complaints about looking to the specification is misplaced. The specification demonstrates that a person of skill in the art would understand “processing unit” to be processor 108 in the bridge device. Thus, there is no application of 112, ¶ 6. Finally, if this term is deemed to be subject to 112, ¶ 6, then the corresponding structure is processor (108), and, to the extent an algorithm is necessary, it is recited in the claim language and in the above recited portions of the specification. Regardless, Defendants fail to prove by clear and convincing evidence this term is indefinite. *Sonix*, 844 F.3d at 1377.

4. “processing unit for setting the IPPC of one of the ports of one of said bridges within the MSTI to a lower IPPC when said port is part of the VLAN member set” (Claim 8)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface</p> <p>Structure: Indefinite</p>

The presumption against applying 112, ¶ 6 here is not overcome for similar reasons as discussed for the “processing unit” term immediately above. More specifically, here, a person of skill in the art would understand the claim language to refer to structure, where the specification for example, recites “the **processing units 108 in bridges A, B, C and D** are used to set the IPPC of any port P1, P2 and P3 of any bridge A, B, C and D within one MSTI to a LoIPPC value if that

port is part of the VLAN member set.” ’435 patent, 7:63-67 (emphasis added). Moreover, the specification also states that “it can be readily appreciated by those skilled in the art that the present invention provides a method for fully- or semi-automatically configuring IPPCs of ports in the bridges of a computer network and in fully- or semi-automatically creating as many new MSTIs as necessary to ensure proper VLAN connectivity.” *Id.*, 8:4-9. Accordingly, as the specification shows, the “processing unit” in this term is processor (108) within a bridge device. *See e.g., Prisia Eng’g Corp.*, 948 F.3d at 1354. Finally, if this term is deemed to be subject to 112, ¶ 6, then the corresponding structure is processor (108), and, to the extent an algorithm is necessary, it is recited in the claim language and in the above recited portions of the specification. Regardless, Defendants fail to prove by clear and convincing evidence this term is indefinite. *Sonix*, 844 F.3d at 1377.

5. Entirety of claims [9-11, 13-18]

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	Indefinite

WSOU disagrees that Defendants can group together the *entirety* of each of the **nine** claims as a single issue. *See Schumer v. Laboratory Computer Systems*, 308 F.3d 1304, 1316 (Fed. Cir. 2002) (“When determining the validity of the claims of a patent, each claim must be separately considered”).⁴ WSOU objects to Defendants’ treatment of the nine claims in groups as improper. *Id.* Regardless, Defendants’ arguments fail. For Claims 9, 16, 10, 17, 11, and 18, each of the elements cited by Defendants merely claim the system possesses the recited structure capable of performing the recited functions. *See e.g., MasterMine Software, Inc. v. Microsoft Corporation*, 874 F.3d 1307, 1313-16 (Fed. Cir. 2017) (holding that “the claims at issue here merely claim that the system ‘possess[es] the recited structure [which is] capable of performing the recited functions’” and holding that “[t]hough claim 8 includes active verbs—presents, receives, and

⁴ Defendants are incorrect that WSOU treated this as “one term” (Resp. Br. at 31, n.18). This “term” was selected by Defendants, and the spreadsheet submitted to the Court merely memorializes Defendants’ selections. Regardless, this issue isn’t something a party can waive. As a matter of law, each claim must be separately considered.

generates—these verbs represent permissible functional language used to describe capabilities of the "reporting module.") (emphasis added); *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 827-28 (Fed. Cir. 2016) (holding that the claims were unlike those in *IPXL Holdings* and *Katz* because they “make clear that the ‘generating data’ limitation reflects the capability of that structure rather than the activities of the user,” and “do not reflect an attempt to claim both an apparatus and a method, but instead claim an apparatus with particular capabilities.”). For claims 13 and 15, the limitation of claim 15 (and all of claim 13 for that matter) again recite permissible functional language used to describe the capabilities of the system. *Mastermine*, 874, F.3d at 1315-16. The same is true for Defendants’ arguments as to claim 14. Defendants argue that “the claims here cannot be properly described as system capabilities” (Resp. Br. at 32), but Defendants provide no authority or analysis, and certainly not by clear and convincing evidence. *Sonix*, 844 F.3d at 1377.

IV. U.S. Patent No. 8,402,129 (Case No. 6:20-cv-00479) Claim Terms

A. “rate of change” (claim 3)

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	Plain and ordinary meaning; not an instantaneous value measured at a fixed point in time

Dell engages in a flawed claim construction approach: first proposing an unduly narrow construction under the guise of “plain and ordinary meaning” and then misreading the intrinsic record as allegedly supporting its construction.

First, the term “rate of change” is a fundamental concept that would be readily understood by a POSITA.⁵ A POSITA would understand that any variable can have a rate of change. Using the car example as Dell did (Resp. at 37 n.22), the rate of change of the variable distance is speed.

⁵ Tellingly, despite doing so for other terms (Resp. at 3, 5 (citing Exs. 1-3 & 5)), Dell provides no support in the technical literature for its construction that carves out “instantaneous value measured at a fixed point in time” from the plain and ordinary meaning. The Court can readily infer from Dell’s silence that there is no such support exists.

One way to calculate speed is to measure the distance at two points and divide by the time it took to cover that distance. For instance, consider a car traveling on a road from a mile marker 0 to mile marker 60 in the span of one hour. The car's speed (or rate of change) is 60 miles per hour, which is calculated by subtracting the difference in distance and dividing by the time period, *i.e.*, (60 miles – 0 miles) / 1 hour. If speed is measured at even hour increments, one does not have to divide by the time period; the “per hour” is assumed in the calculation. As an alternative to this calculation, a driver could determine speed using various instruments and/or methodologies such as a speedometer, GPS, or radar gun.⁶

Second, the portions of the intrinsic evidence that Dell cites merely show one way of calculating rate of change. But just as with the car example, disclosing one way to calculate rate of change does not define “rate of change” itself. For instance, the ‘129 describes one way to calculate rate of change where the monitored variable is $x(t)$ where x is the variable that varies over time, t . ‘129 patent at 4:18-22. Consistent with the car example above, the ‘129 patent describes calculating rate of change by subtracting two sequential values of $x(t)$. *Id.* at FIG. 4. Just as in the car example where the increments are one hour, there is no need to divide by the time increment because the time increments are regular intervals. The rate of change is thus described as “ $x_i(t) - x_i(t-1)$,” which equates to rate of change of x per one time increment. *See id.* at FIG. 4; 6:16-21. While the ‘129 patent describes this calculation as one way to calculate rate of change, it does not state that “rate of change” is limited to or defined by this calculation. *See generally id.* A POSITA would understand that rate of change could be calculated using different methods and instruments (similar to the car speed example above). In particular, claim 3 recites “**monitoring usage of the resource** in a node to determine when **a rate of change of the usage** exceeds a first predetermined threshold.” Notably, the claim does not recite monitoring a variable and then calculating rate of change based on change of that variable. Rather, the claim merely recites more

⁶ In its car example, Dell refers to “rate of change” of speed. Resp. at 37 n.22. The rate of change of speed is acceleration. Both speed and acceleration are rates of change.

broadly to “monitoring *usage of the resource*” to determine when “*rate of change of the usage* exceeds.” Thus, there is no requirement that a variable itself be monitored or that the rate of change be calculated based on the monitoring of that variable. Thus, both the claims and specification support rejecting Dell’s construction.

Third, the prosecution history also supports that “rate of change” is not limited to the particular method of calculating “rate of change.” *See* Br. at 36. Dell attempts to fault WSOU for not identifying the following sentence in the prosecution history with respect to Mandal: “A rate is clearly *measured* using a time interval, or some other interval by which rate may be *measured*.” *Id.* at 36 (citing Ex. 16 at 11) (emphasis added). But this sentence merely explains how rate of change “*may be measured*.” It does not define what “rate of change” is or disavow any scope of the plain and ordinary meaning of “rate of change.” Just because “rate of change” may be measured a particular way does not define the term “rate of change” itself.

B. “initiating a poll of resources in the nodes of the network by the management station in response to reporting from the node or a time interval being exceeded” (claim 3)

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	Both of these events trigger a poll

The parties’ positions on this term merely reflect that the plain and ordinary meaning should apply and that no construction is necessary. In particular, as WSOU noted, the syntax of the claim language itself makes the plain and ordinary meaning clear:

The syntax of the claim requires that the management station must be capable of initiating a poll in response to both “reporting from the node” and “a time interval being exceeded.” But the management station only “initiat[es] a poll” when one of the two events are met—“reporting from the node *or* a time interval being exceeded.”

Br. at 38-39. Dell agrees with both statements. Resp. at 38 (“Defendants agree ...”); *id.* at (“Defendants agree, so this is a non-issue”).⁷ Thus, because the syntax is clear (as evidenced by

⁷ Dell wrongly suggests that WSOU should have responded to Dell’s email regarding this term.

the parties' agreement), there is no need to deviate from the plain and ordinary meaning, and no further construction is necessary.

Dell has largely walked away from its above-listed construction. It now concedes that the inclusion of "trigger" in its construction can be replaced with "initiate" to track the claim language. Resp. at 38 n.25. Dell now proposes that "management station" be construed as "a management station that is capable of initiating a poll in response to both reporting from the node and a time interval being exceeded." *Id.* at 39. But Dell's new modified proposal merely rephrases the wording of the actual claim language. There is no need to do so where, as here, the plain and ordinary meaning of the claim language is clear on its face.

See Resp. at 39 (citing Ex. 19). Dell's email only addressed the first sentence in the block quote above from WSOU's Brief and did not take a position with respect to the second sentence. *See id.* Because Dell's email did not resolve all of the disputes and left an issue unresolved, WSOU did not agree to Dell's proposal and determined that the issue was best addressed in this Reply.

Dated: March 31, 2021

Respectfully submitted,

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CERTIFICATE OF SERVICE

A true and correct copy of the foregoing instrument was served or delivered electronically via the U.S. District Court [LIVE]- Document Filing System to all counsel of record on March 31, 2021.

/s/ Ryan Loveless
Ryan Loveless